

**TECHNICAL MANAGEMENT TEAM
MEETING NOTES
June 27, 2001
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON**

TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>

DRAFT

FACILITATOR'S NOTES ON FUTURE ACTIONS

Facilitator: Richard Forester

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the record of the meeting, only a reminder for TMT members.

Current System Conditions:

Cathy Hlebechuk reported on COE operations and Tony Norris reported for the BOR. Grand Coulee is operating between 1280 and 1282 and Dworshak was at elevation 1586.5 feet last night. Regarding systems operations, there is a transmission problem involving Libby, Dworshak, Hungry Horse and Albeni Falls, there is a need to schedule flow changes about 4 days in advance.

SOR 2001-7:

Oregon, Washington, USFWS and NMFS requested that Dworshak begin a discharge level of 5 kcfs July 2-4, then ramp up to 7 kcfs July 5-7 and begin 10 kcfs July 7. The justifications surrounding this request regard benefits to juvenile fall chinook and rising temperatures in the Snake River. Paul Wagner reported that average temperature for the last 18 hours in the Lower Granite forebay was 66.8 F. The Nez Perce Tribe, CRITFC, and Idaho disagreed with discharging before July 4 and are concerned with impacts on premature Clearwater Chinook as well as recreational problems for the holiday. Part of the opposition argument was based on a hypothesis that not as much cold flow augmentation water may be needed in order to cool water in the Snake because Snake River flows are so low. Consequently augmentation discharge can be delayed or phased in more slowly. Proponents suggested that the lower water levels were already taken into account as illustrated by the smaller start up discharges (from 5 kcfs to 7, to 10). Idaho suggested augmentation to start July 8; the Nez Perce may be in the process of developing another SOR regarding Dworshak. There being no consensus, the SOR was elevated to IT for Thursday, June 27 at 3pm. The question posed to IT by Idaho and Nez Perce is:

Due to biological concerns regarding Clearwater fall chinook subyearlings and recreational concerns surrounding the July 4th holiday, should the proposed SOR be delayed a week?

ACTION: COE will coordinate tomorrow's IT meeting with NMFS. Kathy Ceballos will fax the information out to TMT representatives and IT chairs. Cindy Henriksen will e-mail a meeting announcement to TMT and IT members.

Libby Operations:

The COE proposed to ramp up to 6 kcfs beginning Monday, July 2. No disagreement was voiced. The COE will monitor inflows and increase flows if needed to draft to 2439' by the end of August.

ACTION: Libby will ramp up to 6 kcfs July 2.

Develop Recommended Operations:

Tony Norris reported that an agreement was made with Montana to continue to fill Hungry Horse and begin a flat flow of 1.5 kcfs beginning July 2 and draft to 3540' by the end of August. Montana agrees as long as the run-off forecast continues as predicted. BOR and Montana will continue to coordinate throughout the summer and HH outflows will be adjusted if needed to draft to 3540' by the end of August. Grand Coulee remains at 1280-1282. It is expected to be drafted to 1278 by the end of August; NMFS suggested to do this earlier rather than later in the month of August.

Finalize TMT Guidelines and 2001 Water Management Plan:

Cathy Hlebechuk posted finals last Wednesday. The TMT guidelines are now finalized. Regarding the WMP, Paul Wagner raised concerns over consistency of language of decisions already made and submitted edits to the WMP.

ACTION: Scott Boyd will revise and post changes to WMP 2001. Send comments to Cathy Hlebechuk before Friday and finalize the WMP 2001 at Tuesday's meeting.

Lewiston Update/ Dworshak Modeling:

Paul Wagner reported on the meeting, which mainly discussed the long-term gas waiver and temperature modeling done by John Yearsley. No conclusion was made as to the best scenario. The states and tribes are committed to sending a letter with concerns to COE regarding the long-term waiver.

ACTION: Cindy Henriksen will send John the TMT schedule and invite him to present his scenarios.

Face-to-Face Meeting, July 3, 1-4:

Agenda items are:

- X Results of Dworshak operation discussion at IT meeting
- X Summer Spill Results from the June 29 Regional Execs. Meeting
- X Operation Updates
- X Finalize WMP
- X EPA Modeling

X Update on Fish Runs Indexes Adjusted for Spill at Bonneville B Chris Ross

1. Greeting and Introductions

The June 27 Technical Management Team conference call, held at the Customs House in Portland, Oregon, was chaired by Cathy Hlebechuk of the Corps and facilitated by Richard Forester. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Rudd Turner at 503/808-3935.

Hlebechuk welcomed everyone to the meeting, then led a round of introductions and a review of the agenda.

2. Current System Conditions.

Hlebechuk reported that last night's Libby elevation was 2428.9, 10 feet below the end-of-June target elevation in the Federal operations plan. Libby filled 4.3 feet last week. Albeni Falls is still refilling; it was at 2061.9 feet as of midnight last night, so we're closing in on the end-of-the-month elevation of 2062-2062.5 feet there, she said. Week-average flows at Priest Rapids last week were 98.4 Kcfs, with day-average flows of between 60 Kcfs and 119 Kcfs.

At Dworshak, the current elevation is 1586.5 feet, Hlebechuk said. Last week's average flow was 28.7 Kcfs at Lower Granite, 125 Kcfs at McNary and 134 Kcfs at Bonneville Dam. Hlebechuk reported that the Corps conducted its special operation on Monday, filling Lower Granite pool over the weekend to allow project personnel to move a bulkhead. On Monday night, the excess water was evacuated to return the project to MOP, yielding a 50 Kcfs flow pulse at that project from 7 p.m. to midnight.

Tony Norris said Hungry Horse has now reached its June 30 target elevation of 3540 feet; project discharge continues at minimum, 500 cfs. Grand Coulee is currently at elevation 1282 feet and passing inflow, which will be the operation for the rest of the summer.

Rick Pendergrass said the power system continues to operate to meet load; things are going smoothly at this time, although there is a transmission system problem west of Hatwaii. Hlebechuk explained that the problem involves Libby, Dworshak, Hungry Horse and Albeni Falls; essentially, we need to know generation ahead of time for those four projects – it requires a bit more advance notice for the scheduling, she said.

3. New System Operational Requests.

On June 26, the Corps received SOR 2001-7. This SOR, supported by ODFW, USFWS, WDFW and NMFS, requests the following specific operations:

- Beginning July 2, operate Dworshak at the following discharge levels: July 2, 3 and 4, release 5 Kcfs; July 5 and 6, release 7 Kcfs, July 7 and 8, release 10 Kcfs. Maintain the same temperature regulation as implemented this week (48-52 degrees F).

Christine Mallette spent a few minutes going through the contents of this SOR, the full text of which is available via the TMT homepage. Please refer to this document for full details and justification.

Mallette noted that temperatures in Lower Granite forebay are now exceeding 66 degrees F, and have increased by 2 degrees F over the past few days. In addition, flows at Lower Granite are significantly lower than the flows called for at this point in the season in the 2000 FCRPS Biological Opinion; this operation will help increase flows at that project. Given the fact that the subyearling fall chinook migration is now well underway, it is imperative to begin Dworshak flow augmentation as soon as possible, she said.

Paul Wagner noted that over the past 18 hours, the average water temperature in the Lower Granite forebay has been 66.7 degrees; in addition, the weather forecast for the Lewiston area shows temperatures in the 90s next week. It is, however, 60 degrees and pouring rain in Lewiston at the moment, Steve Pettit observed. The concern is that we need to get ahead of the temperature curve in the reservoir, Wagner said.

Traditionally, we have held off on the Dworshak releases until after the July 4 holiday, said Greg Haller. True, Wagner replied; that's why we have limited the release to 5 Kcfs until that point. There is a recreational concern, said Hlebechuk; any draft will make the fringes of the reservoir muddy and slippery over the holiday. Chris Ross observed that inflows are in the 2-3 Kcfs range at Dworshak, currently; at most, the planned operation would expose a foot or two of bank during the 5 Kcfs release period.

Kyle Martin noted that the power market is also soft at the moment; which is another reason to delay the onset of this operation. Wagner and Jim Nielsen replied that, with temperatures at 66.7 degrees in the Lower Granite forebay and rising, they do not see a great deal of prematurity in this operation.

The group devoted a few minutes of discussion to which temperature modeling scenarios yielded the fewest days in excess of 20 degrees C at Lower Granite; there was some disagreement about which showed the best results.

Haller asked whether the fact that there are still wild Clearwater fall chinook subyearlings rearing in the Lower Clearwater has been considered in this SOR. Yes, Wagner replied; that is the reason for the slower ramp-up rate, as well as the slightly higher release temperatures, called for in this SOR. Dave Statler said the needs of the Clearwater fall chinook also have to be considered in this SOR; those fish need more growth before they make their way downstream. There needs to be a balance between the needs of the Clearwater fall chinook and the needs of subyearlings at lower Granite, and the Nez Perce would like to wait until the second week of July before Dworshak discharge is ramped up to 10 Kcfs, he said. Releasing 5 Kcfs should be adequate to meet flow and temperature needs at Lower Granite, he said; we feel that ramping up higher than that would be too detrimental to the fall chinook in the Clearwater. Statler added that the tribe is currently working on an SOR outlining the release volumes they feel would be appropriate. Our feeling is, in essence, why go to 10 Kcfs at this time, while weather conditions are still relatively cool? Statler said.

Haller said the Nez Perce recommend that, until the Lower Clearwater fall chinook acquire a few more temperature units – by July 15 or so – it doesn't make sense to dramatically increase Dworshak outflow. Given the low volume currently passing Lower Granite, we can have a much larger temperature impact through a smaller Dworshak release, he said. The group discussed current water and air temperature forecasts and likely future conditions. Wagner reiterated that, in NMFS' view, water temperatures are already perilously close to the 68-degree threshold at Lower Granite forebay and more hot weather is in the forecast.

What Dworshak flow level does the tribe consider to be appropriate for next week? Nielsen asked. I don't know that we have a number, as far as the Lower Granite water temperature that should trigger the onset of flow augmentation from Dworshak, Haller replied. Essentially, we were hoping to resolve this next week, Haller said – we're seeking some balance here. Likewise, said Wagner – that is the intent of this SOR. Again, said Haller, starting the Dworshak releases before July 4 is a new wrinkle. Nielsen observed that the operation proposed in the SOR is a compromise – the initial proposal was to begin releasing 10 Kcfs from Dworshak on July 2. He added that Billy Connor's latest forecast shows that 50% of the subyearling migration will have passed by July 16.

Haller and Kyle Martin observed that this proposed operation may be in violation of Idaho water law. Henriksen noted that the SOR proposes a fairly broad range of temperatures for the Dworshak release; she said her perception is that the 50 degree middle range is acceptable to most TMT participants. Statler said the Nez Perce might prefer to see a lesser volume released at a lower temperature, to keep more volume available in Dworshak for use later in the season; in general, however, the tribe has no problem with a 50-degree release temperature.

The other thing to bear in mind is that, according to the model results, it could be up to a week before the impact of the Dworshak releases will be felt on water temperatures at Dworshak, Wagner said. At a higher rate of Dworshak discharge, the impact is felt sooner. That would argue for waiting until after the Fourth of July weekend, and beginning the release at a higher volume, Haller said – if we start July 9, we would see an impact around July

12, while if we start the release on July 2 at a lower volume, we would see the impact around July 9. The longer you wait, however, the higher the starting temperature will be that you're trying to reduce, Wagner said.

The discussion continued in this vein for some time. After a few minutes of further debate, Haller said the tribes have laid out their reasons for opposing this SOR; he asked that the salmon managers wait a week – until July 9 – before beginning the Dworshak draft. The discussion then reverted to the question of current fish size, and the potential impacts of the proposed operation on undersized juveniles in the Clearwater and Snake Rivers; the bottom line, said Statler, is that these fish are still in the river, and will be detrimentally impacted if we start releasing cold water from Dworshak too soon.

Steve Pettit said he had spoken to Jim Yost this morning; Idaho does not support this SOR, because of the management plan adopted by the Idaho legislature. Idaho would like to strike some sort of compromise, he said, by allowing for flow augmentation to begin July 8, after the Fourth of July holiday week. Pettit added that a joint Idaho/tribal Dworshak release plan is under development, and should be available for discussion next week. What flow level does Idaho advocate on July 8? Jim Litchfield asked. We didn't have a specific Dworshak discharge level in mind, Pettit replied; essentially, we would propose a ramp-up to full powerhouse capacity at Dworshak. Recreational access over the Fourth of July is a concern, he said, particularly given the fact that Dworshak is nearly 14 feet below full pool.

Do we need to elevate this issue to the IT? Forester asked. Nielsen said Washington does not feel it would be appropriate to delay implementation of this SOR, given the current weather and temperature forecast information, and the current temperatures in the Lower Granite forebay. Mallette said Oregon agrees with Washington's position, and would be in favor of elevating it to IT. Since Idaho is opposing this SOR, is it up to them to raise it to IT? Forester asked. Idaho or the Nez Perce Tribe, Pettit replied. After a brief debate, it was agreed that Idaho and the Nez Perce will elevate this issue to IT, which will take up this issue at a conference call tomorrow.

What is the specific question we will ask the IT to consider? Henriksen asked. After a brief caucus, Idaho and the Nez Perce framed the question as follows: "Due to biological concerns regarding fall chinook subyearlings in the Lower Clearwater River, and recreational concerns during the Fourth of July holiday, should the proposed SOR be delayed a week?"

The time of the IT conference call will be determined by the availability of the required parties; Henriksen said the Corps will take responsibility for coordinating this meeting. The TMT Guidelines suggest 3 p.m. Thursday for IT conference calls, Ross observed.

4. Libby Operations.

Hlebechuk said that, at its last meeting, the TMT talked about ramping up to the minimum bull trout flow of 6 Kcfs at Libby on July 1 unless the action agencies were otherwise instructed. We're now thinking about starting that operation on July 2, rather than July 1, since July 2 is a Monday, she said. That would be acceptable to Montana, Jim Litchfield replied; there is some concern about the large runoff volume forecast for that basin, but we'll just have to keep an eye on that, he said. David Wills added that the Fish and Wildlife Service has no objection to this planned operation. We will ramp up Libby outflow, starting Monday, July 2, at a rate of 1 Kcfs per hour, until we reach a discharge rate of 6 Kcfs, Hlebechuk said.

5. Lower Granite Temperature Update.

Wagner reiterated that, as discussed in Agenda Item 3, forebay temperatures are rising steadily at Lower Granite forebay; they are currently 66.8 degrees F.

6. Lewiston Meeting Update/Dworshak Modeling.

Last meeting, Tom Lorz said he would report on this item, Hlebechuk said. Wagner replied that the Lewiston meeting focused on two main issues, the first of which was long-term Dworshak operations. The Corps is seeking a long-term TDG waiver at Dworshak, said Haller; essentially, the state and tribes listened without

endorsing that concept. The second part of the Lewiston meeting focused on John Yearsley's temperature modeling at Dworshak, Wagner said; these were the same results presented at last week's TMT meeting by Chris Ross. We discussed the relative merits of these runs at the meeting, he said; the scenario that resulted in the fewest exceedences of the 68 degree threshold was to release 10 degrees C straight through once Lower Granite forebay temperatures exceeded 66 degrees for two consecutive days, Wagner said. Ultimately, however, there was general agreement that the TMT will be the forum in which this operation is determined. Haller said Idaho and the Nez Perce agreed at the meeting to send a letter, outlining their concerns, to the Corps. Henriksen said she will invite John Yearsley to a future TMT meeting to present his most recent modeling results.

7. Dworshak Operations.

Dworshak operations will be determined at tomorrow's IT conference call.

8. Recommended Operations.

Hlebechuk reiterated that Libby will continue to release 4 Kcfs until the morning of July 2, at which point it will be ramped up to 6 Kcfs. Norris said Hungry Horse will be providing a flat 1.5 Kcfs flow through the end of August, which is expected to put that project at elevation 3540 on August 31. Reclamation plans to start that operation on Monday, July 2; the only variation will be to increase generation and outflow in response to the presence of lightning in the Hungry Horse area. Litchfield said Montana supports this Hungry Horse operation, with the caveat, again, that the forecast needs to be watched closely.

Grand Coulee will continue operate to maintain an elevation of 1280-1282 feet through the end of summer, Norris added, essentially passing inflow while maintaining a two-foot operating range. Pendergrass said that, while Grand Coulee elevation might float slightly above that 1282-foot ceiling, that will be the approximate elevation range at that project. When do you think you might draft Grand Coulee to elevation 1278? Ross asked. I can't answer that right now, Pendergrass replied. NMFS would prefer to use that water earlier in the summer, rather than later, so that the operating range would be a little lower than it is currently, Ross said. We don't need to decide that right now, but it's something to consider.

9. Finalize TMT Guidelines and 2001 Water Management Plan.

Hlebechuk said she had posted the most recent version of the Guidelines and 2001 Water Management Plan on the TMT homepage last week; any further comments were to be submitted by last Friday. No comments were received, she said; however, this morning, Paul Wagner called and said he had some additional comments on the Water Management Plan that need to be included. It was agreed that the TMT Guidelines can now be considered final. Wagner went briefly through his proposed changes to the 2001 Water Management Plan; at the end of this discussion, it was agreed that Wagner's edits are acceptable, and that once they are incorporated, the 2001 Water Management Plan will be considered final.

10. Next TMT Meeting Date.

The next meeting of the System Configuration Team was set for Tuesday, July 3 from 1-4 p.m. It was agreed that this meeting will be a conference call. Meeting notes prepared by Jeff Kuechle, BPA contractor.

TMT PARTICIPANT LIST

JUNE 27, 2001

NAME	AFFILIATION
Ruth Abney	COE
Scott Boyd	COE

Ruth Brooks	PGE
Mike Butchko	PowerX
Dick Cassidy	COE
Margaret Filardo	FPC
Richard Forester	Facilitation Team
Russ George	Water Management Consultants Inc.
Richelle Harding	D. Rohr & Associates
Robin Harkless	Facilitation Team
Cindy Henriksen	COE
Cathy Hlebechuk	COE
Jim Litchfield	Consultant (Montana)
Ningjen Liu	IPC
Christine Mallette	ODFW
Kyle Martin	CRITFC
Jim Nielsen	WDFW
Tony Norris	Reclamation
Mike O'Bryant	Columbia Basin Bulletin
Steve Pettit	IDFG
Rick Pendergrass	BPA
Chris Ross	NMFS
Dave Statler	Nez Perce Tribe
Glen Traeger	AVISTA Energy
Paul Wagner	NMFS
Steve Wallace	PacifiCorp
David Wills	USFWS
Greg Haller	Nez Perce Tribe